1. (Currently Amended) An industrial network redundancy system for providing communications redundancy between industrial network nodes comprising:

at least two industrial network nodes, each having a plurality of network ports to a switched network;

a plurality of communications paths between respective network ports of the at least two industrial nodes, wherein the plurality of communication paths comprise the switched network; and

a respective data link protocol layer residing on each of the at least two industrial network nodes for determining which of the plurality of communications paths to utilize for outgoing communications and for determining to which port of the other of the at least two industrial network nodes such communications are ~~should be~~ addressed.

2. (Original) An industrial network redundancy system for providing communications redundancy between a first industrial network node and a plurality of second industrial network nodes comprising:

the first industrial network node and the plurality of second industrial network nodes, each having a plurality of network ports to a switched network;

a plurality of communications paths between respective network ports of the first industrial network node and each of the plurality of second industrial network nodes, all of the plurality of communication paths comprising the switched network; and

a respective data link protocol layer residing on the first industrial network node and each of the plurality of second industrial network nodes wherein the plurality of communications paths are switched based on detection of a fault in connectivity between nodes.

3. (Original) An industrial network node comprising:

a plurality of network ports connected to a single switched network, wherein a second industrial network node is also connected to the switched network; and

a data link protocol layer transparently usable by higher layers of a protocol stack to facilitate network communications to the second industrial network node, the data link protocol layer being adapted to determine which of the plurality of network ports to use to transmit a communication to the second industrial network node, and to forward communications received on any of the plurality of network ports.

4. (Original) The industrial network node according to claim 3 wherein each industrial network node comprises a communication end-station.

5. (Original) The industrial network node according to claim 4 wherein the communication end-station is selected from the group consisting of a computer, a field module, and a control module.

6. (Original) The industrial network node according to claim 3 wherein the higher protocol stack layers above the data link layer include an IP layer.

7. (Original) The industrial network node according to claim 6 wherein the higher protocol stack layers above the data link layer include an application layer.

8. (Original) The industrial network node according to claim 3 wherein the switched network further comprises at least one IEEE 802.1d compliant bridge.

9. (Original) The industrial network node according to claim 3 wherein in determining which of the plurality of network ports to use to transmit a communication to the second industrial network node, the data link protocol layer employs an alternate port based on physical link status information received from its ports and end-to-end connectivity status received from a reliable Logical Link Control (LLC) Type 2 or 3.

10. (Original) The industrial network node according to claim 3, wherein the plurality of network ports conform to an IEEE 802.3 link aggregation standard.

11. (Original) A method of providing network communication redundancy between a first and second node connected via a switched industrial network, the first and second node each having at least two physical network ports, wherein for each node, one physical port is a primary port associated with a primary communications stack and the other physical port is an alternate port, the method comprising:

determining at the first node that a communications fault has occurred on that node's primary port;

unbinding the primary communications stack from the primary port at the first node transparently to communications stack layers above a data link layer;

binding the primary communications stack to the alternate port at the first node transparently to communications stack layers above the data link layer; and

forwarding further outgoing network communications associated with the primary communications stack from the alternate port of the first node.

12. (Original) The method according to claim 11, wherein each physical network port of the first node has a distinct network and MAC address within the switched network.

13. (Original) The method according to claim 12, further comprising the step of transmitting a broadcast packet from the first node via the alternate port to inform network switches of the MAC address of the alternate port.

14. (Original) The method according to claim 11, wherein the primary port and alternate port of the first node are connected to the switched network via different network switches.

15. (Original) The method according to claim 11, wherein the primary port and the alternate port conform to an IEEE 802.3 link aggregation standard.

16. (Original) The method according to claim 11, wherein the first and second nodes are each of a type selected from the group consisting of a computer, a field module, and a control module.

17. (Original) The method according to claim 11, wherein the communications stack layers above the data link layer include an IP layer.

18. (Original) The method according to claim 11, wherein the communications stack layers above the data link layer include an application layer.

19. (Original) The method according to claim 11, wherein the switched industrial network further comprises at least one IEEE 802.1d compliant bridge.